means of an adjusting screw, to press lightly against the face of the ebonite ring, and to produce metallic contact with the studs when passing over them. The binding screws around the case of the instrument are connected in serial order with the wires inserted in the bore of the thermometer, and the traverser is in permanent electrical contact with the binding screw L, to which is attached the line-wire.

If the transmitter is intended to convey the signals from more than one thermometer, there are inserted in the ebonite ring, at suitable intervals, three small platinum studs very close together. These studs are not in connection with the thermometers, but with the binding-screw C, which is in permanent connection, through the battery, with earth. By this arrangement the current is short-circuited whenever the traverser passes over these extra studs, and the three signals sent down the wire in quick succession serve to show that the transmitter has commenced to send signals from another thermometer.

The axis which drives the traverser carries round with it a metallic disk, which is drilled with a hole into which fits, when the clockwork is at rest, a small plug. This plug, which acts as a detent, is attached to the heavier side of a light lever, the opposite end of which is furnished with an iron armature in close proximity to the poles of a very small electro-magnet. One end of the magnet coil is connected with the binding-screw C, and so through the battery with earth, whilst the other end of the coil is connected through the binding-screw M (Figs. 2 and 3) with another line-wire which is carried to the observing station, and is capable of being put to earth through an ordinary electric bell-push.

The general arrangement of the whole apparatus is shown in the diagram, Fig. 3. The action of the instrument is as follows:—The line-wire connected with M is momentarily put to earth at the observing station by depressing the bell-push; this causes a current to circulate round the coils of the electro-magnet, which, attracting its armature, liberates the detent, and starts the clock. The number of signals now passed down the line-wire by the passage of the traverser over the platinum studs will be a measure of the height of the mercury column in each thermometer. The traverser, having made one complete revolution, is arrested by the falling of the plug into the disk.

It is evident that any number of observing stations can be established along the line-wire, and also that, if desired, the apparatus may be made automatically to register the temperature at any required interval of time.

HORACE T. BROWN

THE RECENT DISCOVERY OF THE BODY OF RHINOCEROS MERCKII IN SIBERIA

IT is a well-known fact that carcases of extinct animals, such as the Mammoth (*Elephas primigenius*) and Tichorhine Rhinoceros (*Rhinoceros tichorhinus*) are obtained in a more or less perfect state of preservation in the frozen tundras of Siberia. A memoir recently presented by Dr. Leopold von Schrenck to the Imperial Academy of Sciences of St. Petersburg,[1] informs us that the most recent discovery of this nature (which took place in 1877) is of a specially interesting character. The remains found upon this occasion turn out, not to belong to either of the above-named animals, but to a distinct species of Rhinoceros, *Rhinoceros Merckii* (better known in England as *Rhinoceros leptorhinus* of Owen), which had never been known previously to occur in such a condition. Unfortunately full advantage has not been taken of this extraordinary discovery. Although the carcase, as already mentioned, was found in 1877, it was not until March, 1879, that it came to the knowledge of the Imperial Academy. At the same time the sad fact was communicated that only the head and one foot of the whole body of this extinct monster had been preserved, all the remaining portions having been allowed to drift away into the River Yana, upon the banks of which it had first come to light.

The head in question, after having been exhibited in Moscow, at the Anthropological Exhibition of 1879, was presented to the Zoological Museum of St. Petersburg, where upon comparison with the Tichorhine Rhinoceros, it was shown to belong, not as had been previously supposed, to that species, but to *Rhinoceros Merckii*.

Of this specimen, which is naturally reckoned among the greatest treasures of the Imperial collection, Dr. L. von Schrenck now gives us an excellent description, illustrated by several figures, which show that in external as well as (as now already known) in osteological characters, *R. Merckii* presents many salient features to distinguish it from *R. tichorhinus*.

As regards the former distribution of *R. Merckii*, although it was once supposed that this species was confined to Western and Southern Europe, recent researches had already proved that this extinct rhinoceros had a much more extensive range. Besides being found in several localities in Eastern Europe, Brandt, in his excellent Memoir on the Tichorhine Rhinoceroses, has shown that this species formerly existed in Eastern Siberia. It is therefore not now so remarkable that a whole frozen body of this former inhabitant of the Steppes of Siberia should have been discovered on the banks of one of the rivers, preserved frozen during many thousands of years, as we know to have been also the case in the previously obtained specimens of the Mammoth and the Tichorhine Rhinoceros.

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[1] "Das erste Fund einer Leiche, *Rhinoceros Merckii*, Jaeg." Von Dr. Leop. v. Schrenck (Mém. Ac. Imp. Sc. St. Pet., vii^{e} série, vol. xxvii. No. 7, 1880).

NOTES

WE give on another page an abstract of the revised edition of the proposed statutes on the professoriate promulgated by the Oxford University Commissioners. It is, to say the least, hopeful to find the Commissioners so amenable to criticism and suggestions, and the proposed revised statutes, it will be found, obviate most of the objections which came from all quarters to the harassing and humiliating nature of the first draft. Occupying the position we do in relation to science, we could not but condemn the statutes in their first form. Were we the mouthpiece of the College of Preceptors, then possibly we might not have objected to the Oxford professors being legislated for as if they were merely elementary school-teachers; but as we are bound to consider the interests of science and its advancement, and as we believe one of the chief duties of an Oxford professor, as of a German or a French professor, to be original research, we could not but consider the statutes in their first form as a serious blunder.

ON Monday, March 15, the Paris Academy of Sciences held its annual sitting, when the prizes for 1880 were delivered. M. Ed. Becquerel was in the chair. He opened the sitting by an *éloge* of M. Michel Chasles, who died quite recently, and who was one of the most popular members of the Academy. At the end of his address he reminded his fellow members of the completion of the great work of M. Milne-Edwards, which has lasted for a quarter of a century. The great prize for mathematics was awarded to M. Halphen, with honourable mention to M. Poincarre; the Poncelet Prize to M. Leonte, engineer of the machinery constructed by the Government. A sum of 3000 francs was awarded to M. Ader for having advanced in an essential manner phonetic telegraphy (also telephony). The Trémont Prize was awarded to M. Vinot, the editor of the only astronomical paper published in France, and the founder of the only astronomical society. M. Dumas, with his usual eloquence, read the *éloge* of M. Victor Regnault, the celebrated physicist. M. Regnault was born in Germany during the occupation of the Rhenish provinces by France. His father was killed during the invasion of Prussia by France, and his beloved son was killed during the siege of Paris. After the last event took place Regnault's life was a long agony, which M. Dumas described with touching eloquence.

THE Transit of Venus Commission established by the French Academy of Sciences has resumed its labours under the presidency of M. Dumas. A credit has been given by the Government for constructing new refractors. Not less than twelve are now building, to be used on the several stations which have been already selected, and will be ready by the end of the year. The heads of the scientific missions will soon be appointed, as well as their staff. The greater number of instruments built for the 1874 transit have been disposed of to several public institutions.

SIR JOHN LUBBOCK showed a good deal of courage in introducing his motion on Ancient Monuments into the House of Commons in the present temper and obstructed condition of that body; nevertheless he carried his point. All he did was to move that in the opinion of the House the Government should take some steps to provide for the better protection of ancient national monuments; the House declared itself of this opinion by a considerable majority, though, we imagine, something more must be done before Government has the power to step in and prevent the destruction of any ancient monument. That there is no time to be lost if we do not wish most of these relics of the past to disappear entirely, is evident from the long list given by Sir John Lubbock of important monuments that have already been mutilated or destroyed. Sir John suggested that any owner of such a monument who contemplated its destruction should be compelled first to offer it for sale to the country. This course would be both simple and effective.

MR. ROBERTS of the Nautical Almanac Office is authorised by resolution of Council of the Secretary of State for India, dated August 7, 1880, to make it generally known that his Tide Predicter may be employed for the preparation of Tide Tables (subject to the payment of a nominal fee to the India Office for the use of the machine) for any port for which the requisite data are forthcoming on application to him. The Tide Predicter has already been used for the preparation of the Tide Tables for 1880 for the ports of Bombay and Kurrachee (published by authority of the Secretary of State for India in Council) with the most satisfactory results. It has also been used for the Tide Tables for 1881 for Indian ports, which include, in addition to those of Bombay and Kurrachee, the tides also for Aden, Okha Point, and Beyt Harbour (Gulf of Cutch), Karwar, Beypore, the Paumben Pass, and Vizagapatam. The Tide Tables for 1882, the preparation of which is already far advanced, will include, in addition to the above eight ports, the following seven, viz.:—Madras, Rangoon, Moulmein, Port Blair, and on the Hooghly River, Fort Gloster, Diamond Harbour, and Kidderpore (Calcutta). It is anticipated that in addition to a still further number of Indian ports to be predicted for 1883, that Mr. Roberts will have the preparation of Tide Tables for Table Bay, Port Elizabeth, East London, and Durban, tidal observations at these places being now in progress, or shortly to be commenced for this purpose. The observations, when a sufficient series has been taken, will be placed in the hands of Mr. Roberts for the determination of the requisite data for the predictions.

THE Senatus Academicus of Aberdeen University have resolved to confer the degree of LL.D. on David Ferrier, M.A., M.D., Professor of Forensic Medicine in King's College, London

WE have received from Mr. Marsden of Regent Street, Gloucester, a "List of British Birds," with, as an appendix, "The Graduated List for Labeling Eggs." With similar lists the present one compares favourably, and it is a pity that Mr. Marsden, who is evidently an intelligent man, did not make his catalogue still more perfect. The insertion of species like the Russet Wheatear (*Saxicola stapazina*), and the Barred Warbler (*Sylvia nisoria*), which are not entered in so recent a work as Newton's edition of "Yarrell," show that the author is abreast of the latest information on the subject of rare visitants to this country. But the Black-winged Kite (*Elanus cœruleus*) has equal rights to a place in a British list, and we are sorry to see the Great Black Woodpecker (*Picus martius*) and the Rufous Swallow (*Hirundo cahirica*) still allowed as visitors to Great Britain. The careful researches of Mr. J. H. Gurney, jun., published in Sharpe and Dresser's "Birds of Europe," have entirely disproved ever single supposed occurrence of the Great Black Woodpecker, while the so-called Rufous Swallow turned out to be nothing but a common *Hirundo rustica* in fine spring plumage. The abbreviations of authors' names are, to say the least, ingenious, but as they differ in nearly every case from those adopted by all ornithologists, we cannot perceive any real advantages to be gained by their use, as they involve continual reference to the introductory explanation to find out the author's meaning. If brevity in quoting authors' names is desired, "Bp." for Bonaparte is better than "Bo," and is moreover frequently so employed. "Bon" in Mr. Marsden's list means Bonnaterre, but in many ornithological works Bonaparte is thus signified, so that we cannot commend this portion of the author's labours. We were at first puzzled as to the meaning of the "Graduated List for Labeling," but we find on referring to it that the names of the British birds are there printed in various-sized types according to the size of the different bird's egg, and we are sorry to think that there is still a demand for a list of this kind whereby collectors become satisfied with the printed name attached to their captures instead of having, as every genuine egg should have, the full particulars of its history written upon it in ink.

THAT we may still expect many additions to the avi-fauna of Eastern Africa has been amply proved during the past year or two by the collections sent from the East Coast by Dr. Fischer to Berlin and Dr. Kirk to this country. A further contribution has recently been made by the veteran ornithologist, Dr. Hartlaub, who has just published in the *Abhandlungen* of the Bremen Natural History Union an interesting paper on Birds, collected by Dr. Emin Bey in the region of the Upper Nile. The traveller proceeded from Lado in 5° N. lat. along the Nile to the Albert Nyanza, visiting the northern extremity of the Coja Lake, and travering the country in a northerly direction to Fatico. The result of this expedition considerably modifies the generally received opinion respecting the relation of the avi-fauna of the Upper Nile region; for although a large number of the species obtained are, as might be expected, Abyssinian, there is a certain infusion of South and West African forms, with a sprinkling of peculiar genera and species. The new species described are as follows:—*Cisticola hypoxantha*, *C. marginalis*, *Eminia* (g.n.) *lepida*, *Drymocichla* (g.n.) *incana*, *Dryoscopus cinerascens*, *Tricholais flavotorquata*, *Muscicapa infulata*, *Hyphantornis crocata*, *Hyphantica cardinalis*, and *Sorrella emini*. The Whale-headed Stork (*Balæniceps rex*) was looked for in vain on the Victoria and the Albert Nyanzas, and is said to exist only north of Schambé.

MESSRS. W. EAGLE CLARKE and William Denison Roebuck, secretaries of the Yorkshire Naturalists' Union, are preparing for publication "A Handbook of Yorkshire Vertebrata: being a Complete Catalogue of British Mammals, Birds, Reptiles, Amphibians, and Fishes, showing what Species are or have, within

Historical Periods, been found in the County of York." The authors state that when engaged on the compilation of various papers on the natural history of the county for the *Transactions* of the Yorkshire Naturalists' Union, find that there is a deficiency of information of a reliable nature as to the detailed distribution in Yorkshire of the various species of vertebrated animals, and this in spite of the fact that all available published information has been by them systematically and diligently collected. This deficiency they believe to some extent arises from the circumstance that never yet has there been published a list of the vertebrated animals (or of any subdivision thereof) of the county as a whole. Such a list they propose to supply. The Birds will be undertaken by Mr. Clarke, the Mammals, Reptiles, and Amphibians by Mr. Roebuck, and the Fishes jointly. The writers would be glad to have co-operation, in the way of supplying lists and notes for as many districts in the county as possible. Scattered observations on any species are as much desired as lists. Notes on the historical evidence of the former existence of species in the county, and on the local names used for the various species, are also desirable. Communications are requested to be addressed to either author at his residence, or at No. 9, Commercial Buildings, Park Row, Leeds.

THE *Times* correspondent sends some additional facts to account for the recent earthquake at Casamicciola. "The lamentable accident," Prof. Palmieri states, "which has happened at Casamicciola was not only not felt by the University seismograph, nor by that of Vesuvius, but did not extend even to the whole of the island. It must be regarded, therefore, as a perfectly local phenomenon, produced probably by the sinking of the soil occasioned by the slow and continual subterraneous action of the mineral waters." That there were severe shocks of earthquake, the *Times* correspondent goes on to say, is unquestionable, but unless the ground had, so to speak, been prepared for it, the disaster would probably have not been so great. The fact is that the island is burrowed in many parts. Wherever there is any chance of finding a spring the ground is hollowed out, and the fortunate proprietor makes a good thing of it during the season. In addition to this fact, a considerable part of the soil is formed of clay, which is held in high estimation; and not merely Naples, but the country around to a great extent, is provided with bricks and pottery from Ischia. This branch of industry has been carried on successfully for many years, and it may readily be understood, therefore, that the subsoil is so perforated that any violent shock suffices to wreck the houses on the surface. Ischia is well known to be of volcanic formation, and has, in times long past, been subject to shocks and eruptions from Epomeo, the now dormant cone in the centre of the island. What is called the Lake of Ischia is supposed to have been the crater of an extinct volcano. The last great eruption occurred in 1301, and lasted two months, inflicting complete ruin on the island. A scientific Commission, composed of Professors Palmieri, Scacchi, Linno, and Guiscardi, have gone to Casamicciola to endeavour to ascertain whether the earthquake there was due to local causes or not.

EARTHQUAKE shocks continue in Switzerland to an extent that, in view of the terrible disaster at Ischia, is causing considerable apprehension. A very strong oscillation was observed at Heniveil, in Zürich, early on Monday morning, and about two o'clock on the following morning two separate shocks were felt at Lausanne. Two deaths resulted in a rather singular way on Friday last from the earthquake of the preceding day. The shock loosened a mass of rock overhanging a quarry at Oberburg, in Berne, and twenty-four hours afterwards it fell, literally grinding to powder two unfortunate men who were working hard by.

IT has been decided by a large number of friends and admirers of the late Mr. Frank Buckland to perpetuate, by a substantial memorial, the services which he has rendered to the study of natural history and fish-culture by his numerous writings, and also by the formation of his celebrated fish museum at South Kensington, which he has bequeathed to the nation. A committee which has been formed with this object in view includes among others Sir William Vernon Harcourt, M.P., Sir Philip Cunliffe-Owen, Prof. Owen, Mr. Spencer Walpole (Inspector of Salmon Fisheries), and several other gentlemen representing the different fishery boards throughout the country and the various fishery interests. The exact form which the memorial shall take has not yet been determined. This will be decided at the next meeting of the committee, which will shortly be held.

WE hear that Mr. Walter Hill is about to retire from the Curatorship of the Botanic Gardens at Brisbane, in connection with which his name has become widely known. It is rumoured that the Gardens will be placed under the management of a board.

WE are glad to see that the Liverpool College of Chemistry has been reopened after being renovated and refitted with modern apparatus for research. Under the guidance of Dr. Tate and Mr. G. H. Sharpe, we have no doubt it will prove a useful centre for instruction and science.

THE stenographic machine which we mentioned in our last issue was presented on March 11 to the Société d'Encouragement, meeting under the presidency of M. Dumas. It is a small instrument, about 1½ foot long and 1 foot wide, placed on a stand 2½ feet high, on which it is easy to play with both hands. The number of elementary signs is only six, which by mutual combination give seventy-four phonetic letters. It has been worked with an astounding velocity, reproducing the words pronounced by a man reading a passage from a book. The limit of velocity is stated to be 200 words in a minute, which is more than sufficient, no speaker having ever uttered more than 180. The signs are very neatly printed on a paper band passing automatically under the types. They can be read by any person conversant with the peculiarities of the system, which requires the teaching of a very few months. The work of the stenographer is more difficult, but in little more than a year he can be educated. Women and persons who have an acute and correct hearing can practise it with success. Blind people, generally having very delicate hearing, will be most useful, the reading and translation being done by other people. The same machinery is available for every language in existence. The system is so perfect that it can be used for reproducing a language that is neither spoken nor understood by the operator. But under such circumstances the orator must speak slowly and in a very distinct manner. This machine was worked by a young lady belonging to the stenographic staff of the Italian Senate, where the machine is in constant use.

THE work of laying subterranean cables is proceeding favourably from Nancy to Paris. This telegraph line is composed of twelve insulated wires placed in a large tube of cast iron. For each length of 500 metres doors have been arranged so that any section can be removed and replaced without having to open the ground, which is necessary in the German system of laying the cables in a solid bed of asphalte.

WE are asked to make known that at the request of the Commissaire-Général, the Society of Telegraph Engineers and of Electricians have undertaken to supply to and collect from intending British exhibitors, applications for space at the forthcoming Exhibition. Forms of application and copies of the general rules can be obtained at the offices of the Society, 4, Broad Sanctuary, Westminster, London, by letter addressed to the Secretary of the Society, or by personal application between the hours of 11 and 5.

THE *Photographic News* of March 11 publishes an excellent photo-engraving of Fox Talbot.

MR. W. HEIGHWAY has issued a useful "Handbook of Photographic Terms," an alphabetical arrangement of the processes, formulæ, applications, &c., of photography for ready reference. Piper and Carter are the publishers.

A NEW Natural History Society has been formed at Banbury under the title of "The Banburyshire Natural History Society and Field Club." Mr. T. Beesley, F.C.S., is president, and Mr. E. A. Walford, hon. secretary.

THE *Times* Dublin correspondent telegraphed on Sunday night:—"A very interesting scientific work, the most important of its kind yet attempted in the kingdom, has just been completed. It is the great refracting telescope, constructed by Mr. Grubb of Rathmines, Dublin, for the Austro-Hungarian Government, and it is to be placed in the Observatory at Vienna. A commission appointed by the Government to examine the work transmitted yesterday to the Austro-Hungarian Embassy in London a report expressing their full approval of the manner in which the task has been completed. It is a matter of no little pride to Ireland that she has produced the largest refracting as well as the largest reflecting telescope in the world." Several interesting details concerning the telescope are give in the *Irish Times* of March 10.

M. LOUIS FIGUIER'S *L'Année Scientifique et Industriel*, published by Hachette and Co., is a really useful summary of the science of the year. The twenty-fourth issue is quite up to previous volumes, and in the absence of anything of the kind published in this country may prove serviceable to English readers.

THE *Annuaire* of the Montsouris Observatory for 1881 contains much useful information in meteorology and allied subjects. Under the head of Agricultural Meteorology are a variety of experimental data on the action of heat, light, and water on vegetation, with their application to special cultures. There is also a meteorological *résumé* for the agricultural years 1873-80, and an article on Bacteria in the Atmosphere.

THE additions to the Zoological Society's Gardens during the past week include a Bonnet Monkey (*Macacus radiatus*) from India, presented by Mr. R. W. Okes-Voysey; an Azara's Fox (*Canis azaræ*) from Buenos Ayres, presented by Mr. William Petty; a Gold Pheasant (*Thaumalea picta* ♂) from China, presented by Mr. W. H. St. Quintin; an Ornamental Ceratophys (*Ceratophys ornata*) from Buenos Ayres, presented by Mr. E. W. White, F.Z.S.; a Water Vole (*Arvicola amphibius*), British, purchased; two Dingo Dogs (*Canis dingo*), born in the Gardens.

CHEMICAL NOTES

OBSERVATIONS have been published from time to time concerning the existence of alkaloid-like substances in exhumed corpses. These substances appear to be produced in organised matter which, after brief exposure, has been kept out of contact with air. A summary of these observations and a discussion on their bearing on toxicological examinations is given by Husemann in a recent number of *Archiv für Pharmacie*. Substances having different physiological actions appear to be produced at various stages of decay of flesh or vegetable matter. A substance resembling atropine in its action has been separated from an anatomical maceration fluid by Sonnenschein, and this same substance has been found in the bodies of persons who have died from typhus fever.

AN important paper on "The Influence of Isomerism of Alcohols on the Formation of Ethereal Salts," by Menschutkin, appears in *Annales Chim. et Phys.* The process of etherification reaches a limit in every instance, but this limit varies with the molecular weight, and generally with the "structure" of the alcohol employed. In the ethylic series the limit increases with increase of molecular weight, but is not influenced by isomerism; in the secondary alcohols the limit does not show an increase for increased molecular weight. The influence of isomerism is most marked in this series.

IT is well known that by adding dilute acid to a solution of sodium thiosulphate and warming, a copious precipitate of yellow sulphur is obtained. Colson states in *Bull. Soc. Chim.* that when a very dilute solution of sodium thiosulphate is added to dilute hydrochloric acid, hydrogen sulphide and sulphuric acid are alone produced. He supposes that the water present acts on the sulphur as quickly as it is liberated from the thiosulphate, in the manner indicated; if flowers of sulphur be acted on by boiling water, a similar reaction occurs, but proceeds only very slowly.

FROM a study of the thermal phenomena which accompany the action of water on alcohols, and of alcohols on water, Alexejeff (*Bull. Soc. Chim.*) concludes that hydrates of the saturated alcohols exist, which hydrates are less stable the greater the number of carbon atoms in the molecule.

THE heats of formation, and of solution, of a large series of metallic sulphides, and sulphydrates, principally those of the alkalis and alkaline earths, have been determined and published in *Annales Chim. et Phys.* (January), by M. Sabatier.

IN an investigation of alcoholic fermentation (*Annales Chim. et Phys.*) Boussingault states that by the addition of a large quantity of yeast to wines rich in sugar, fermentation proceeds rapidly at a boiling temperature, provided the pressure be considerably diminished.

IN the *Berliner Berichte* Herr T. Donath describes experiments on *chinolin*, in which he shows that this alkaloïd possesses marked antiseptic properties: in 0·2 per cent. solution it stops the putrefaction of urine and lactic fermentation; in 0·4 per cent. solution it completely stops the putrefaction of blood and largely decreases the coagulation of milk. Blood containing 1 per cent. of chinolin cannot be coagulated. At low temperatures the alkaloïd forms compounds with albumin, which coagulate.

IN a paper "presented to both Houses of Parliament" the subject of "*oleomargarine*" as manufactured in the United States is discussed. This substance is made from beef suet by disintegrating in warm water, passing through a fine sieve, melting at 120° F., settling, draining off the oil, and allowing to solidify. If "*butterine*" is to be made, the oil is mixed with 10 per cent. of milk, churned, coloured with annatto, rolled with ice, and salted. During the year ending June 30, 1880, 18,833,330 lbs. of oleomargarine were exported from New York, the greater part going to Holland. The manufacture and sale of this substance is strongly condemned by many butter merchants, and as strongly recommended by various well-known American chemists. Analyses given in the report show very small differences between oleomargarine and natural butter, except in the particular of soluble fats, of which oleomargarine contains considerably less than natural butter.

THE Newcastle-upon-Tyne Chemical Society publishes in its *Proceedings* a paper by R. Hasenclever, on the alkali manufacture in Germany in 1880, in which it is shown that the consumption of alkali in Germany at present exceeds the supply, and that manufacturers are now extending their works and building new ones. The ammonia process is coming largely into use; the cost of plant and expenses are less than when Leblanc's process is employed; but the latter process is also extending year by year.

A NEW journal, devoted to analytical chemistry, has just made its appearance with the title *Repertorium der analytischen Chemie;* it is published by Voss of Leipzig, and promises to be useful to those who are interested in this branch of applied science.

OBSERVATIONS on the production of crystalline albuminoid compounds have from time to time been published. In a recent number of *Zeitschrift für Krystallographie* a general account of these observations is given by Herr Schimper, and the following, among other, general statements are made: albumenoid substances are capable of crystallising, but the crystals (or crystalloids, as they are called) differ from ordinary crystals in their